

1-7 Deliverables (*Interim*)

Note: This section is considered interim until Chapter 5 is completed. A revised section will be available at that time. Attachment 1-7.1, “Deliverable Distribution List (Project Development)”, for deliverables required through project development phases of projects is considered complete.

Summarized in this section are general deliverable requirements and information for documents to be submitted for projects with bridges or other transportation-related structures.

Registered Professional Engineer registration seals and signatures required on deliverables shall be in accordance with the requirements of the State of California Business and Professions Code and Caltrans policy as stated elsewhere in this Guide.

All submitted documents shall be neat and legible. Paper plans must be stapled outside of the left border and other documents must be bound. Loose-leaf type binders may be used. Project identifications are to be clearly shown on each document and electronic media as stated in this section and elsewhere in this guide. The contents of all documents should be indexed, and all pages numbered.

The attachments, 1-7.1 Deliverable Distribution Lists (Project Development) & 1-7.2 Deliverable Distribution List (Construction Support), indicate the required documents and the number of copies that are submitted to OSFP by the Consultant for the various phases of the project.

Deliverable Distribution List (Project Development)

The “Deliverable Distribution List (Project Development)” is used for project development from inception to PS&E Completion. It is intended for use by Districts, sponsoring agencies, and consultants to convey the deliverable requirements for each element of the project for which OSFP provides oversight. Following is a description of the information each column in the list contains.

Section Reference

Provides a convenient cross-reference to the pertinent sections elsewhere in this manual.

Deliverable Review Duration

Provides the review duration OSFP requires to review the different deliverables for typical projects. The durations take into account the time needed for OSFP to coordinate reviews through the various functional units within the Division of Engineering Services. Sponsoring agencies and their consultants must include the appropriate review duration into the project schedules. The Liaison Engineer

should be consulted early in the project to assist with schedule development to ensure that all necessary reviews are properly considered. This particularly applies to projects that contain non-typical elements.

During the development of the project, the schedule should be reviewed with the Liaison Engineer to ensure that the elements of the project can be reviewed as originally planned.

Minimum Total Copies

Provides the number of copies of documents required. Before making any copies of the deliverable documents, the consultant should always confer with Liaison Engineer to determine the exact requirements.

The Liaison Engineer will determine the need for additional document copies which may be required for projects with non-typical features, such as pumping plants, movable bridges, vehicular tunnels, steel structures and railroads. Additional copies may also be required for those projects which require extraordinary distribution to Districts, the Federal Highway Administration, DES Technical Committees or individual Technical Specialists.

Unless otherwise approved by the Liaison Engineer, the deliverables shall conform to the numbers indicated.

Copies per Structure (S) or Project (P)

Indicates whether the number of copies is on a per structure (S) basis or on a per project (P) basis. In certain cases, the designation (S/P) is used. If there are a large number of structures on a project the deliverables should be on a per structure basis. If there are a small number of structures on the project, deliverables can be based on a per project basis.

Remaining Columns

Provides the details regarding the involvement of other units that participate in project reviews. These columns are primarily for use by OSFP.

In addition to design reviews performed by OSFP, other offices within the Division of Engineering Services provide reviews in specialized areas. Listed below, in the same order as shown on the list to provide clarity, are the functional areas that most often perform reviews:

- Office of Geotechnical Services
- Structure Hydraulics
- Structure Design
- Structure Construction
- Structures Maintenance
- Earthquake Engineering



- Structures Specifications
- Bridge Architecture & Aesthetics
- Various Technical Specialists or Committees, such as, Bridge Barriers, Retaining Walls, Signs, Underground Structures, Concrete, Structural Steel, etc.
- Structures Estimating

The Liaison Engineer will determine the involvement of the specific units and will distribute the documents as necessary. Consultants shall only submit deliverables to the Liaison Engineer and not directly to the units shown.

Attachments

1. 1-7.1 Deliverable Distribution Lists (Project Development)
2. ~~1-7.2 Deliverable Distribution Lists (Construction Support)~~ (Hold for chapter 5)

Deliverable Distribution List (Project Development)	OSFP				OGS	HYD	Others												
	Section Reference	Review Duration (Weeks)	Minimum Total Copies	Copies per Structure (S) or Project (P)	Liaison Engineer	OSFP FILE	OSFP Str Reviewer	OSFP Detailing	Foundations	Hydraulics	DSD	DSC	DSM&I	EQ Engineering	Specifications	Aesthetics	Specialists	Estimating	District
Project Study Report/Project Report (PSR/PR, WBS 150, 160, 180)																			
PROJECT STUDY REPORTS (PDS) (WBS 150)																			
1. Advanced Planning Study	3-2		6	S	1	1			1 ¹	1 ¹			1					1 ¹	
2. Preliminary Foundation Report	2-3		2	S	1				1 ¹										
3. Preliminary Hydraulics Report	2-4		2	S	1					1 ¹									
4. Structure Advanced Planning Study Checklist	3-2	4	6	S	1	1	1		1 ¹	1 ¹			1					1 ¹	
5. Design Memo	3-2		6	S	1	1	1		1 ¹	1 ¹			1					1 ¹	
6. Cost Estimate	3-2		2	S	1													1 ¹	
7. Draft PSR			1	P	1														
Final Approved PSR (after APS Approval)		NR	2	P	1	1	1												
PROJECT REPORTS (WBS 160)																			
Items 1 through 6 above ¹																			
Draft Project Report w/ Structures Planning Studies ¹		4	1	P	1														
Final Signed Project Report (after APS Approval)		NR	2	P	1	1	1												

General: Unless otherwise noted, all plans are to be reduced paper size (279x432 mm, 11"x17").
¹ At the discretion of the Liaison Engineer

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Deliverable Distribution List (Project Development)				Section Reference	Copies per Structure (S) or Project (P)			Liaison Engineer	OSFP			OGS	HYD	Others						
					Review Duration (Weeks)	Minimum Total Copies	Copies per Structure (S) or Project (P)		OSFP FILE	OSFP Str Reviewer	OSFP Detailing			DSD	DSC	DSM&I	EQ Engineering	Specifications	Aesthetics	Specialists
Design Phase																				
PRELIMINARY DESIGN (WBS 210.215)																				
Pre-Type Selection																				
Bridge Site Data Submittal ³				4-2	4	2	S													1
Boring Plan				2-3	4	2	S/P	1				1								
Draft Final Hydraulics Report ⁴				2-4	4	2	S	1					1							
Type Selection																				
Type Selection Report				4-2		14	S	1	1	1	1	1	1	1	1	1	1	1	1	1
Bridge Site Data Submittal w/attachments				4-1		1	S	1												
General Plan (electronic .DGN file)				2-2		1	S				1									
Draft Foundation Plan				4-2	4	2	S			1	1									
Final Hydraulics Report				2-2		2	S	1						1						
Preliminary Foundation Report				2-3		4	S	1	1			1	1							
Post-Type Selection																				
Type Selection Review Meeting Summary				4-2	NR	2	P	2												
Updated General Plan Estimate				4-2	NR	2	S	1												1
Updated General Plans ¹				4-2	NR	40	S	1	1	1	1	1	1	1	1	1	1	1	1	1
				See GP Distribution List, Memo to Designers																

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² Contact District Project Manager to determine necessary number of copies.

³ Submit minimum of 4 weeks prior to Type Selection Submittal

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³ Contact District Project Manager to determine necessary number of copies.

⁴ Submit minimum of 4 weeks prior to Type Selection Submittal

Deliverable Distribution List (Project Development)	OSFP				OGS	HYD	Others							
	Liaison Engineer						DSD							
	Review Duration (Weeks)						DSC							
	Minimum Total Copies						DSM&I							
	Copies per Structure (S) or Project (P)						EQ Engineering							
							Specifications							
							Aesthetics							
							Specialists							
							Estimating							
							District							
65% UNCHECKED DETAILS (WBS 240)														
Uncheckd Structure Plans (paper)				4-3	6	S	1	1	1	1				1
Uncheckd Structure Plans (electronic)				4-3	1	S		1						
Draft Road Plans				4-3	4	P	1	1	1			1		
Draft, Final Foundation Report				4-3	4	S	1	1		2				

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Deliverable Distribution List (Project Development)	Section Reference	Review Duration (Weeks)	Minimum Total Copies	Copies per Structure (S) or Project (P)	OSFP				OCS	HYD	Others																
					Liaison Engineer	OSFP FILE	OSFP Str Reviewer	OSFP Detailing			Foundations	Hydraulics	DSD	DSC	DSM&I	EQ Engineering	Specifications	Aesthetics	Specialists	Estimating	District						
INITIAL PS & E (WBS 2.40)																											
Structure Plans	2-2	6	13	S	1	1	1	1	1	2					2	1					1 ^{2,3}	2					
Structure Plans (electronic file)	2-2		1	S						1																	
Design Calculations	4-5		1	S						1																	
Check Calculations	4-5		1	S						1																	
Structure Special Provisions	4-6		6	P						1		1				2			1			1 ^{2,3}					
Special Provisions (electronic file)	4-6		1	P														1									
Memo to Specification Engineer/Estimator	4-6	3	P	1														1			1 ^{2,3}						
Cost Estimate	4-7	2	S						1												1 ^{2,3}						
Quantity Calculations & Summary Sheets ²	4-7	2	S						1												1 ^{2,3}						
Working Day Schedule ²	4-7	2	P						1												1 ^{2,3}						
Final Hydraulics Report ¹	2-4	4	S						1		1		1					2									
Final Foundation Report	2-3	5	S						1		1		2					2									
Road Plans (paper) & Road Special Provisions (electronic)	4-8	3	P						1		1		1		1												
Consultant Quality Control Statement	1-6	1	P						1																		

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² Do not submit for non-state advertised projects

³ Liaison Engineer Route submittal to Specifications for state advertised projects.

Deliverable Distribution List (Project Development)	Section Reference				Review Duration (Weeks)		Minimum Total Copies		Copies per Structure (S) or Project (P)		OSFP				OCS	HYD	Others																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
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